XPort™ Network-Enables IMAG's Blue232 Wireless Product

CHALLENGE IMAG Technologies needed to provide Ethernet connectivity for its Bluetooth-enabled wireless data communication products.

SOLUTION Lantronix's XPort™ embedded device server delivers serial-to-Ethernet connectivity in an easy-to-integrate, compact package.

BENEFIT XPort's ease of implementation and compact form factor allowed IMAG to save months of development time and enter new markets ahead of their competition.

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Doug Stevens
Director of Sales and Marketing
IMAG Technologies

IMAG Technologies produces secured wireless data communication links using Bluetooth technology. To provide serial-to-Ethernet connectivity for its Blue232 secure wireless data communications products, IMAG turned to Lantronix' XPort embedded device server. XPort enabled the development of a compact product that could be brought to market quickly, allowing IMAG to enter previously untapped markets with a product superior to those of their competition.

Advanced Security

The Situation: Wireless Bluetooth-Product Needed Internet Connectivity

IMAG Technologies is one of the only providers of Bluetooth-enabled, IP-addressable, RS-232 communications equipment that transmits data over the Internet. Because IMAG's products are wireless, they can transmit data through walls, floors, ceilings, and between buildings to distances of up to 100 meters (328 feet),significantly reducing installation costs and time, resulting in increased profits. These products are ideally suited for wireless access control, security systems, and wireless data acquisition and control solutions for information.

Due to rising customer demand and the surging use of the Internet for business communications, IMAG realized that it needed to expand the functionality of its wireless data communications devices beyond LAN (Local Area Network) applications. They wanted to provide end users the means to upgrade their legacy equipment at low cost, giving them the ability to monitor and maintain control systems remotely, and centralize databases and event notification for all of their locations.

IMAG

The first product IMAG added Internet connectivity to was the Blue232 wireless cable replacement product. Blue232 is an RS-232-to-wireless bridge for transmitting data.

To enable Internet communications over the Blue232, IMAG Technologies needed a compact network-enabling solution that its design engineers could quickly and easily integrate into the product. The company understood that it had neither the expertise in writing TCP/IP stacks nor the time to build a solution internally. So they turned to a recognized expert – Lantronix.

The Solution: XPort's Compact Size and Ease of Implementation

To meet their product size and time-to-market requirements, the design engineers at IMAG chose Lantronix and its XPort embedded device server to solve their Internet connectivity needs. Networked equipment attaches to the Blue232 through the XPort's RJ45 port, and data transmission occurs between two Blue232s using Bluetooth technology.

A complete network-enabling solution enclosed within a compact, durable RJ45 package, XPort eliminates the complexity of adding serial-to-Ethernet connectivity. It includes a 10Base-T/100Base-TX Ethernet connection, a reliable and proven operating system, an embedded web server, flexible firmware, full TCP/IP protocol stack, and optional 256-bit AES encryption. Best of all, XPort is a solution that can be integrated into most products within weeks. XPort eliminated the need for IMAG Technologies' design engineers to spend upwards of 48 "person-months" and hundreds of thousands of dollars in development time.

According to Doug Stevens, Director of Sales and Marketing, XPort was chosen because it provided an easy-to-integrate and cost-effective way to add network connectivity to the Blue232 product. And the XPort's small form factor made possible the reduction in the size of Blue232's footprint, enabling IMAG Technologies to enter new markets where compact size is a strong differentiator.

The Result: Competitive Edge, New Business Opportunities

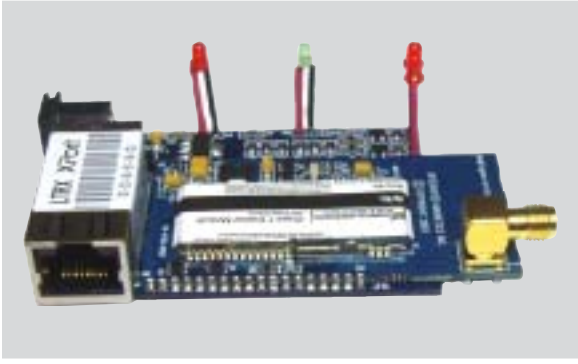
"There are several new business opportunities that have arisen due to the smaller size and data transmission capabilities that XPort enabled for Blue232," said Stevens. "Plus, XPort allowed us to leap ahead of the numerous competitors in our market because we were able to take to market one of the first Bluetooth-enabled, IP-addressable RS-232 connectivity products in the Blue232."

In addition, the XPort expanded the functionality of the Blue232 to enable centralized control of equipment from anywhere in the world at any time. This flexibility in accessing equipment is a critical value-added feature for the company's customers, and IMAG Technologies expects this capability will significantly grow the bottom-line sales for the Blue232 product line.

The Lantronix XPort Advantage

Actual size

- **Everything You Need in a Tiny Package** – The XPort embedded device server provides the most complete integrated solution available to network-enable devices with serial interfaces.
- **Accelerate Time-to-Market** — XPort is so easy to integrate that it seldom requires any changes to your design and can give your products full network connectivity within weeks.
- **Advanced Device Networking Features** – The XPort offers 10Base-T/100Base-TX Ethernet connectivity, robust operating system, embedded web server, full TCP/IP stack, and optional 256-bit AES Rijndael encryption for secure communications.



Mounted alongside a Bluetooth wireless module on IMAG's Blue232 board, Lantronix's XPort enables IMAG customers to monitor and manage control systems remotely over the Internet.

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